

217/785-1705

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT -- NSPS and NESHAP SOURCE

PERMITTEE

Microsoft CH-1 Northlake Data Center
Attn: Roger Huggins
601 Northwest Avenue
Northlake, Illinois 60164

Application No.: 09070018

I.D. No.: 031807AAN

Applicant's Designation:

Date Received: July 8, 2009

Subject: Computer Server Facility

Date Issued:

Expiration Date:

Location: 601 Northwest Avenue, Northlake, Cook County, 60164

This permit is hereby granted to the above-designated Permittee to OPERATE emission unit(s) and/or air pollution control equipment consisting of twenty-seven (27) 2,740 kW (3,673 HP) diesel-powered emergency generator sets and twenty-four (24) cooling towers pursuant to the above-referenced application. This permit is subject to standard conditions attached hereto and the following special condition(s):

1a. This federally enforceable state operating permit is issued:

- i. To limit the emissions of air pollutants from the source to less than major source thresholds (i.e., 100 tons/year for Carbon Monoxide (CO) and Nitrogen Oxides (NO_x)). As a result, the source is excluded from the requirements to obtain a Clean Air Act Permit Program (CAAPP) permit. The maximum emissions of this source, as limited by the conditions of this permit are described in Attachment A.
- ii. To limit the potential emissions of VOM from the source to less than 25 tons/year. As a result, the source is excluded from the requirements of 35 Ill. Adm. Code Part 205 (Emission Reduction Market System). The maximum emissions of this source, as limited by the conditions of this permit, are described in Attachment A.
- iii. To establish federally enforceable production and operating limitations, which restrict the potential to emit for NO_x to less than 100 tons per year so that the source is not subject to the requirements of 35 Ill. Adm. Code Part 217 Subpart Q (Stationary Reciprocating Internal Combustion Engines And Turbines).

b. Prior to issuance, a draft of this permit has undergone a public notice and comment period.

c. This permit supersedes all operating permit(s) for this location.

- 2a. The diesel-powered emergency generator sets are subject to the New Source Performance Standards (NSPS) for Stationary Compression Ignition Internal Combustion Engines, 40 CFR 60 Subparts A and IIII. The Illinois EPA is administering the NSPS in Illinois on behalf of the United States EPA under a delegation agreement. Pursuant to 40 CFR 60.4200(a), the provisions of 40 CFR 60 Subpart IIII are applicable to manufacturers, owners, and operators of stationary compression ignition (CI) internal combustion engines (ICE) and other persons as specified in 40 CFR 60.4200(a)(1) through (4). For the purposes of 40 CFR 60 Subpart IIII, the date that construction commences is the date the engine is ordered by the owner or operator.
- i. Owners and operators of stationary CI ICE that commence construction after July 11, 2005, where the stationary CI ICE are manufactured after April 1, 2006, and are not fire pump engines,
 - ii. Owners and operators of any stationary CI ICE that are modified or reconstructed after July 11, 2005 and any person that modifies or reconstructs any stationary CI ICE after July 11, 2005.
 - iii. The provisions of 40 CFR 60.4208 are applicable to all owners and operators of stationary CI ICE that commence construction after July 11, 2005
- b. Pursuant to 40 CFR 60.4202(b)(1), stationary CI internal combustion engine manufacturers must certify their 2007 model year and later emergency stationary CI ICE with a maximum engine power greater than 2,237 KW (3,000 HP) and a displacement of less than 10 liters per cylinder that are not fire pump engines to the emission standards specified in 40 CFR 60.4202(b)(1) through (2). For 2007 through 2010 model years, the emission standards in table 1 to 40 CFR 60 Subpart IIII, for all pollutants, for the same maximum engine power.

Table 1 to Subpart IIII of Part 60 –Emission Standards for Stationary Pre-2007 Model Year Engines With a Displacement of <10 Liters per Cylinder and 2007-2010 Model Year Engines >2,237 KW (3,000 HP) and With a Displacement of <10 Liters per Cylinder

[As stated in 40 CFR 60.4201(b), 60.4202(b), 60.4204(a), and 60.4205(a), you must comply with the following emission standards]

Maximum engine power	Emission standards for stationary pre-2007 model year engines with a displacement of <10 liters per cylinder and 2007-2010 model year engines >2,237 KW (3,000 HP) and with a displacement of <10 liters per cylinder in g/KW-hr (g/HP-hr)				
	NMHC + NO _x	HC	NO _x	CO	PM
KW>560 (HP>750)		1.3 (1.0)	9.2 (6.9)	11.4 (8.5)	0.54 (0.40)

- c. Pursuant to 40 CFR 60.4205(b), owners and operators of 2007 model year and later emergency stationary CI ICE with a displacement of less than 30 liters per cylinder that are not fire pump engines must comply with

the emission standards for new nonroad CI engines in 40 CFR 60.4202, for all pollutants, for the same model year and maximum engine power for their 2007 model year and later emergency stationary CI ICE.

- 3a. The diesel-powered emergency engine/generators are subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Stationary Reciprocating Internal Combustion Engines, 40 CFR 63 Subparts A and ZZZZ. The Illinois EPA is administering the NESHAP in Illinois on behalf of the United States EPA under a delegation agreement. Pursuant to 40 CFR 63.6590(a), an affected source is any existing, new, or reconstructed stationary RICE located at a major or area source of HAP emissions, excluding stationary RICE being tested at a stationary RICE test cell/stand.
- b. Pursuant to 40 CFR 63.6590(c)(1), a new or reconstructed stationary residential, commercial, or institutional emergency stationary RICE located at an area source must meet the requirements of 40 CFR Part 63 by meeting the requirements of 40 CFR 60 Subpart IIII, for compression ignition engines or 40 CFR 60 Subpart JJJJ, for spark ignition engines. No further requirements apply for such engines under 40 CFR Part 63.
- 4a. Pursuant to 35 Ill. Adm. Code 212.123(a), no person shall cause or allow the emission of smoke or other particulate matter, with an opacity greater than 30 percent, into the atmosphere from any emission unit other than those emission units subject to 35 Ill. Adm. Code 212.122.
- b. Pursuant to 35 Ill. Adm. Code 212.123(b), the emission of smoke or other particulate matter from any such emission unit may have an opacity greater than 30 percent but not greater than 60 percent for a period or periods aggregating 8 minutes in any 60 minute period provided that such opaque emissions permitted during any 60 minute period shall occur from only one such emission unit located within a 305 meter (1000 foot) radius from the center point of any other such emission unit owned or operated by such person, and provided further that such opaque emissions permitted from each such emission unit shall be limited to 3 times in any 24 hour period.
- 5a. Pursuant to 35 Ill. Adm. Code 214.122(b)(2), no person shall cause or allow the emission of sulfur dioxide into the atmosphere in any one hour period from any new fuel combustion source with actual heat input smaller than, or equal to, 73.2 MW (250 mmBtu/hour), burning liquid fuel exclusively to exceed 0.46 kg of sulfur dioxide per MW-hour of actual heat input when distillate fuel oil is burned (0.3 lbs/mmBtu).
- b. Pursuant to 35 Ill. Adm. Code 214.301, except as further provided by 35 Ill. Adm. Code Part 214, no person shall cause or allow the emission of sulfur dioxide into the atmosphere from any process emission unit to exceed 2000 ppm.
- c. Pursuant to 35 Ill. Adm. Code 214.304, the emissions from the burning of fuel at process emission sources located in the Chicago or St. Louis

(Illinois) major metropolitan areas shall comply with applicable 35 Ill. Adm. Code 214 Subparts B through F (i.e., 35 Ill. Adm. Code 214.122(b)(2)).

6. Pursuant to 35 Ill. Adm. Code 218.301, no person shall cause or allow the discharge of more than 3.6 kg/hour (8 lbs/hour) of organic material into the atmosphere from any emission source, except as provided in 35 Ill. Adm. Code 218.302, 218.303, or 218.304 and the following exception: If no odor nuisance exists the limitation of 35 Ill. Adm. Code 218 Subpart G (Use of Organic Material) shall apply only to photochemically reactive material.
7. This permit is issued based on the cooling towers not being subject to the National Emission Standard for Hazardous Air Pollutants (NESHAP) for Industrial Process Cooling Towers, 40 CFR 63 Subpart Q because the cooling towers are not operated with chromium-based water treatment chemicals.
8. Pursuant to 40 CFR 60.11(d), at all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Illinois EPA or USEPA which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.
- 9a. Pursuant to 40 CFR 60.4206, owners and operators of stationary CI ICE must operate and maintain stationary CI ICE that achieve the emission standards as required in 40 CFR 60.4204 and 60.4205 according to the manufacturer's written instructions or procedures developed by the owner or operator that are approved by the engine manufacturer, over the entire life of the engine.
- b. Pursuant to 40 CFR 60.4207(a), beginning October 1, 2007, owners and operators of stationary CI ICE subject to 40 CFR 60 Subpart IIII that use diesel fuel must use diesel fuel that meets the requirements of 40 CFR 80.510(a).
- c. Pursuant to 40 CFR 60.4207(b), beginning October 1, 2010, owners and operators of stationary CI ICE subject to 40 CFR 60 Subpart IIII with a displacement of less than 30 liters per cylinder that use diesel fuel must use diesel fuel that meets the requirements of 40 CFR 80.510(b) for nonroad diesel fuel.
- d. Pursuant to 40 CFR 60.4211(a), if you are an owner or operator and must comply with the emission standards specified in 40 CFR 60 Subpart IIII, you must operate and maintain the stationary CI internal combustion engine and control device according to the manufacturer's written instructions or procedures developed by the owner or operator that are

approved by the engine manufacturer. In addition, owners and operators may only change those settings that are permitted by the manufacturer. You must also meet the requirements of 40 CFR parts 89, 94 and/or 1068, as they apply to you.

- e. Pursuant to 40 CFR 60.4211(b)(1), if you are an owner or operator of a pre-2007 model year stationary CI internal combustion engine and must comply with the emission standards specified in 40 CFR 60.4204(a) or 60.4205(a), or if you are an owner or operator of a CI fire pump engine that is manufactured prior to the model years in table 3 to 40 CFR Part 60 Subpart IIII and must comply with the emission standards specified in 40 CFR 60.4205(c), you must demonstrate compliance according to one of the methods specified in 40 CFR 60.4211(b)(1) through (5).
 - i. Purchasing an engine certified according to 40 CFR part 89 or 40 CFR part 94, as applicable, for the same model year and maximum engine power. The engine must be installed and configured according to the manufacturer's specifications.
 - ii. Keeping records of performance test results for each pollutant for a test conducted on a similar engine. The test must have been conducted using the same methods specified in 40 CFR Part 60 Subpart IIII and these methods must have been followed correctly.
 - iii. Keeping records of engine manufacturer data indicating compliance with the standards.
 - iv. Keeping records of control device vendor data indicating compliance with the standards.
 - v. Conducting an initial performance test to demonstrate compliance with the emission standards according to the requirements specified in 40 CFR 60.4212, as applicable.
- f. Pursuant to 40 CFR 60.4211(c), if you are an owner or operator of a 2007 model year and later stationary CI internal combustion engine and must comply with the emission standards specified in 40 CFR 60.4204(b) or 40 CFR 60.4205(b), or if you are an owner or operator of a CI fire pump engine that is manufactured during or after the model year that applies to your fire pump engine power rating in table 3 to 40 CFR 60 Subpart IIII and must comply with the emission standards specified in 40 CFR 60.4205(c), you must comply by purchasing an engine certified to the emission standards in 40 CFR 60.4204(b), or 40 CFR 60.4205(b) or (c), as applicable, for the same model year and maximum (or in the case of fire pumps, NFPA nameplate) engine power. The engine must be installed and configured according to the manufacturer's specifications.
- g. Pursuant to 40 CFR 60.4211(e), emergency stationary ICE may be operated for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State, or local government, the manufacturer, the vendor, or the insurance company associated with

the engine. Maintenance checks and readiness testing of such units is limited to 100 hours per year. There is no time limit on the use of emergency stationary ICE in emergency situations. Anyone may petition the Illinois EPA or USEPA for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency ICE beyond 100 hours per year. For owners and operators of emergency engines meeting standards under 40 CFR 60.4205 but not 40 CFR 60.4204, any operation other than emergency operation, and maintenance and testing as permitted in 40 CFR 60.4011, is prohibited.

- 10a. Pursuant to 40 CFR 63.6640(f), if you own or operate an emergency stationary RICE, you must operate the emergency stationary RICE according to the requirements in 40 CFR 63.6640(f)(1) through (4). In order for the engine to be considered an emergency stationary RICE under 40 CFR 63 Subpart ZZZZ, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described in 40 CFR 63.6640(f)(1) through (4), is prohibited. If you do not operate the engine according to the requirements in 40 CFR 63.6640(f)(1) through (4), the engine will not be considered an emergency engine under 40 CFR 63 Subpart ZZZZ and must meet all requirements for non-emergency engines.
- i. There is no time limit on the use of emergency stationary RICE in emergency situations.
 - ii. You may operate your emergency stationary RICE for any combination of the purposes specified in 40 CFR 63.6640(f)(2)(i) through (iii) for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by 40 CFR 63.6640(f)(3) and (4) counts as part of the 100 hours per calendar year allowed by this paragraph (40 CFR 63.6640(f)(2)).
 - A. Emergency stationary RICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by Federal, State or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Illinois EPA or USEPA for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency RICE beyond 100 hours per calendar year.
 - B. Emergency stationary RICE may be operated for emergency demand response for periods in which the Reliability Coordinator under the North American Electric Reliability

Corporation (NERC) Reliability Standard EOP-002-3, Capacity and Energy Emergencies, or other authorized entity as determined by the Reliability Coordinator, has declared an Energy Emergency Alert Level 2 as defined in the NERC Reliability Standard EOP-002-3.

- C. Emergency stationary RICE may be operated for periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency.
- iii. Emergency stationary RICE located at area sources of HAP may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted towards the 100 hours per calendar year provided in 40 CFR 63.6640(f)(2). Except as provided in 40 CFR 63.6640(f)(4)(i) and (ii), the 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity.
 - A. Prior to May 3, 2014, the 50 hours per year for non-emergency situations can be used for peak shaving or non-emergency demand response to generate income for a facility, or to otherwise supply power as part of a financial arrangement with another entity if the engine is operated as part of a peak shaving (load management program) with the local distribution system operator and the power is provided only to the facility itself or to support the local distribution system.
 - B. The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions are met:
 - I. The engine is dispatched by the local balancing authority or local transmission and distribution system operator.
 - II. The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region.
 - III. The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines.

- IV. The power is power provided only to the facility itself or to support the local transmission and distribution system.
 - V. The owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the engine owner or operator.
- b. Pursuant to 40 CFR 63.6675, emergency stationary RICE means any stationary reciprocating internal combustion engine that meets all of the criteria in paragraphs (1) through (3) of this definition. All emergency stationary RICE must comply with the requirements specified in 40 CFR 63.6640(f) in order to be considered emergency stationary RICE. If the engine does not comply with the requirements specified in 40 CFR 63.6640(f), then it is not considered to be an emergency stationary RICE under 40 CFR 63 Subpart ZZZZ:
- i. The stationary RICE is operated to provide electrical power or mechanical work during an emergency situation. Examples include stationary RICE used to produce power for critical networks or equipment (including power supplied to portions of a facility) when electric power from the local utility (or the normal power source, if the facility runs on its own power production) is interrupted, or stationary RICE used to pump water in the case of fire or flood, etc.
 - ii. The stationary RICE is operated under limited circumstances for situations not included in paragraph (1) of this definition, as specified in 40 CFR 63.6640(f).
 - iii. The stationary RICE operates as part of a financial arrangement with another entity in situations not included in paragraph (1) of this definition only as allowed in 40 CFR 63.6640(f)(2)(ii) or (iii) and 40 CFR 63.6640(f) (4)(i) or (ii).
- 11a. Pursuant to 40 CFR 80.510(b), beginning June 1, 2010. Except as otherwise specifically provided in 40 CFR 80 Subpart I, all NR and LM diesel fuel is subject to the following per-gallon standards:
- i. Sulfur content 15 ppm maximum for NR diesel fuel.
 - ii. Cetane index or aromatic content, as follows:
 - A. A minimum cetane index of 40; or
 - B. A maximum aromatic content of 35 volume percent.

- 12a. In the event that the operation of this source results in an odor nuisance, the Permittee shall take appropriate and necessary actions to minimize odors, including but not limited to, changes in raw material or installation of controls, in order to eliminate the odor nuisance.
- b. The emergency generator sets at this source shall only be operated with distillate fuel oil grades No. 1 and 2 (i.e., diesel) as the fuel. The use of any other fuel in any emergency generator set at this source requires that the Permittee first obtain a construction permit from the Illinois EPA and then perform stack testing to verify compliance with all applicable requirements.
- c. Organic liquid by-products or waste materials shall not be used in any emission unit at this source without written approval from the Illinois EPA.
- d. The Illinois EPA shall be allowed to sample fuel stored at the source associated with the diesel generator sets.
- 13a. Emissions and operation of the twenty-seven diesel-powered emergency generator sets will not exceed the following:
 - i. Total diesel fuel burned shall not exceed 40,042.8 gallons/month and 400,428 gallons/year.
 - ii. Emissions from the diesel generator sets shall not exceed:

<u>Pollutant</u>	<u>Emission Factor (lbs/1,000 Gal)</u>	<u>Emissions</u>	
		<u>(Tons/Mo)</u>	<u>(Tons/Yr)</u>
Carbon Monoxide (CO)	327.58	6.56	65.59
Nitrogen Oxides (NO _x)	264.36	5.29	52.93
Particulate Matter (PM)	15.52	0.31	3.11
Sulfur Dioxide (SO ₂)	0.21	0.01	0.04
Volatile Organic Material (VOM)	37.36	0.75	7.48

These limits are based on the maximum fuel usage, emission factors are derived from Table 1 to 40 CFR Part 60 Subpart IIII for units with power rating of greater than 560 kW (750 HP) converted to lbs/1,000 gallon of fuel usage using a Brake Specific Fuel Consumption (BSFC) of 8,009.9 Btu/hp-hour, and standard factors for sulfur dioxide (Table 3.4-1, AP-42, Fifth Edition, Volume I, Supplement B, October 1996) with a fuel sulfur content (0.0015%).

- b. The emissions of particulate matter (PM) from the twenty-four cooling towers combined shall not exceed 5.00 tons/year. This limit is based on a nominal emission rate of 1.14 lb/hour total for the cooling towers operating at an overall design flow rate of 90,720 gallons per minute and continuous operation of the cooling towers.

- c. Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total).
- 14. This permit is issued based on the Potential to Emit (PTE) for Hazardous Air Pollutants (HAPs) as listed in Section 112(b) of the Clean Air Act from this source being less than 10 tons/year of any single HAP and 25 tons/year of any combination of such HAPs. As a result, this permit is issued based on the emissions of all HAPs from this source not triggering the requirement to obtain a CAAPP permit from the Illinois EPA.
- 15. This permit is issued based on the diesel-powered emergency generator sets at this source each having a displacement of less than 30 liters per cylinder and have been certified by the manufacturer to meet the standards of 40 CFR 60.4202(a) through (d). As a result, this permit is issued based on these diesel-powered emergency generator sets not being subject to the testing requirements of 40 CFR 60.8.
- 16. Pursuant to 40 CFR 60.4209(a), if you are an owner or operator of an emergency stationary CI internal combustion engine that does not meet the standards applicable to non-emergency engines, you must install a non-resettable hour meter prior to startup of the engine.
- 17a. Pursuant to 40 CFR 60.7(b), any owner or operator subject to the provisions of 40 CFR Part 60 shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative.
- b. Pursuant to 40 CFR 60.7(f), any owner or operator subject to the provisions of 40 CFR Part 60 shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required by 40 CFR Part 60 recorded in a permanent form suitable for inspection. The file shall be retained for at least two years following the date of such measurements, maintenance, reports, and records.
- 18. Pursuant to 40 CFR 60.4214(b), if the stationary CI internal combustion engine is an emergency stationary internal combustion engine, the owner or operator is not required to submit an initial notification. Starting with the model years in table 5 to 40 CFR 60 Subpart IIII, if the emergency engine does not meet the standards applicable to non-emergency engines in the applicable model year, the owner or operator must keep records of the operation of the engine in emergency and non-emergency service that are recorded through the non-resettable hour meter. The owner must record the time of operation of the engine and the reason the engine was in operation during that time.

19. Pursuant to 40 CFR 63.10(b)(3), if an owner or operator determines that his or her stationary source that emits (or has the potential to emit, without considering controls) one or more hazardous air pollutants regulated by any standard established pursuant to section 112(d) or (f) of the Clean Air Act, and that stationary source is in the source category regulated by the relevant standard, but that source is not subject to the relevant standard (or other requirement established under 40 CFR Part 63) because of limitations on the source's potential to emit or an exclusion, the owner or operator must keep a record of the applicability determination on site at the source for a period of 5 years after the determination, or until the source changes its operations to become an affected source, whichever comes first. The record of the applicability determination must be signed by the person making the determination and include an analysis (or other information) that demonstrates why the owner or operator believes the source is unaffected (e.g., because the source is an area source). The analysis (or other information) must be sufficiently detailed to allow the USEPA and/or Illinois EPA to make a finding about the source's applicability status with regard to the relevant standard or other requirement. If relevant, the analysis must be performed in accordance with requirements established in relevant subparts of 40 CFR Part 63 for this purpose for particular categories of stationary sources. If relevant, the analysis should be performed in accordance with USEPA guidance materials published to assist sources in making applicability determinations under Section 112 of the Clean Air Act, if any. The requirements to determine applicability of a standard under 40 CFR 63.1(b)(3) and to record the results of that determination under 40 CFR 63.10(b)(3) shall not by themselves create an obligation for the owner or operator to obtain a Title V permit.
- 20a. The Permittee shall maintain records of the following items so as to demonstrate compliance with the conditions of this permit:
 - i. Diesel generator sets runtime (hours/month, hours/year);
 - ii. Certification from the fuel supplier of weight percent sulfur content of each fuel shipment received;
 - iii. Amount of fuel used (gallons/month, gallons/year);
 - iv. An inspection, maintenance and repair log of the generators listing each activity performed with date;
 - v. Cooling water flow rate (gallons/hour) based on representative operation of the cooling towers;
 - vi. Cooling water total dissolved solids (PM) content, based on representative sampling of water discharge;
 - vii. Total operation of cooling tower (hours/month, hours/year); and

- viii. Monthly and annual emissions of CO, NO_x, PM, SO₂, and VOM from the source with supporting calculations (tons/month, tons/year).
- b. All records and logs required by this permit shall be retained at a readily accessible location at the source for at least five (5) years from the date of entry and shall be made available for inspection and copying by the Illinois EPA or USEPA upon request. Any records retained in an electronic format (e.g., computer storage device) shall be capable of being retrieved and printed on paper during normal source office hours so as to be able to respond to an Illinois EPA or USEPA request for records during the course of a source inspection.
- 21a. If there is an exceedance of or a deviation from the requirements of this permit as determined by the records required by this permit, the Permittee shall submit a report to the Illinois EPA's Compliance Section in Springfield, Illinois within 30 days after the exceedance or deviation. The report shall include the emissions released in accordance with the recordkeeping requirements, copy of the relevant records, and a description of the exceedance or deviation and efforts to reduce emissions and future occurrences.
- b. Two (2) copies of required reports and notifications shall be sent to:
- Illinois Environmental Protection Agency
Division of Air Pollution Control
Compliance Section (#40)
P.O. Box 19276
Springfield, Illinois 62794-9276
- and one (1) copy shall be sent to the Illinois EPA's regional office at the following address unless otherwise indicated:
- Illinois Environmental Protection Agency
Division of Air Pollution Control
9511 West Harrison
Des Plaines, Illinois 60016

If you have any questions on this permit, please contact Jocelyn Stakely at 217/785-1705.

Raymond E. Pilapil
Acting Manager, Permit Section
Division of Air Pollution Control

Date Signed: _____

REP:JRS:psj

cc: Illinois EPA, FOS Region 1
Lotus Notes

Attachment A - Emissions Summary

This attachment provides a summary of the maximum emissions from the Computer Server Facility operating in compliance with the requirements of this federally enforceable permit. In preparing this summary, the Illinois EPA used the annual operating scenario which results in maximum emissions from such a plant. The resulting maximum emissions are below the levels (i.e., 100 tons/year for CO and NO_x) at which this source would be considered a major source for purposes of the Clean Air Act Permit Program. Actual emissions from this source will be less than predicted in this summary to the extent that less material is handled and control measures are more effective than required in this permit.

<u>Emission Unit</u>	E M I S S I O N S (Tons/Year)				
	<u>CO</u>	<u>NO_x</u>	<u>PM</u>	<u>SO₂</u>	<u>VOM</u>
Twenty-seven (27) 2,740 kW (3,848 HP) Diesel-Powered Emergency Generator Sets	65.59	52.93	3.11	0.04	7.48
Twenty-four (24) Cooling Towers	-----	-----	-----	-----	5.00
Totals:	65.59	52.93	3.11	0.04	12.48

JRS:psj